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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR     | ATTORNEY DOCKET NO.        | CONFIRMATION NO.       |
|---|-------------|--------------------------|----------------------------|------------------------|
| 10/553,646  | 12/19/2005  | Mireia Hernandez Estaban | 6647/011                   | 1441                   |
| 2240  | 7590        | 07/03/2007               |                            |                        |
| LEONARD R. NITZBERG<br>1413 BUCKEYE LANE<br>KNOXVILLE, TN 37919 |             |                          | EXAMINER<br>CULLER, JILL E |                        |
|   |             |                          | ART UNIT<br>2854           | PAPER NUMBER           |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

|                               |   |  |
|-------------------------------|---|--|
| Application No.<br>10/553,646 | Applicant(s)<br>HERNANDEZ ESTABAN, MIREIA |  |
| Examiner<br>Jill E. Culler    | Art Unit<br>2854                          |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>20051014</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81(c). No new matter may be introduced in the required drawing. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). Although applicant describes the drawings, no drawings were received with this application.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5-7 11-20 22-24 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,067,906 to Ryan et al.

With respect to claim 1, Ryan et al. teaches a process for ink dispensing, of the type that comprise supplying ink in a container, 16, and the container having a dispensing system, that comprises a tank where doses of ink are poured, characterized in that it comprises the steps of: supplying the ink in a container with deformable walls, provided with container opening means; supporting the full or partially full container in

the dispensing system; opening the container using the opening means, determining an opening; and exerting pressure, using pressure and flattening means, 22, 23, against the container walls, against said opening, so that the combined action of compression pushes the ink contained in the container, thanks to the possibility of deforming the container walls, by the flattening thereof, against the opening, whereby a dose of ink exits. See column 3, lines 31-53 and Fig. 1.

With respect to claims 2-3, Ryan teaches that the step of exerting pressure is performed for a predetermined time, said ink dose being in accordance with said predetermined time characterized in that it comprises a dispensing time control step, wherein said predetermined time is controlled by control means. See column 9 lines 41-47 and Fig. 17.

With respect to claim 5, Ryan teaches that said time control step comprises measuring the height, in the tank, of the dispensed fluid of the dose which exits the outlet. See column 3 lines 60-66 and column 9 lines 41-47.

With respect to claims 6-7 Ryan teaches that said outlet is fixed, in the dispensing system, in a lower position, and said pressure is exerted downwards against the deformable walls of the container characterized in that the step of exerting pressure comprises exerting pressure using a manual plunger and/or lever. See column 3, lines 31-53 and Fig. 1.

With respect to claim 11 Ryan teaches that the walls are deformable. See column 3 lines 50-52.

With respect to claims 12-15 Ryan teaches that the container comprises an outlet for the ink contained to be dispensed, characterized in that it comprises outlet-opening means which comprise a cap or a "push-pull" type device, wherein when the element which surrounds the outlet is pulled, it opens, closing when said element is pressed. See column 3 lines 37-44 and column 5 lines 13-17.

With respect to claim 16 Ryan teaches that it comprises coupling means of the outlet to the fixed part of the dispensing system. See column 3 lines 37-44.

With respect to claims 17-18 Ryan teaches that said opening means comprise a lower valve, whose valve body comprises an inner space which connects to the inside of the container, the valve sealing element being a cap, displaceable between a position of maximum opening and a closed position, wherein the larger base of the seal is essentially level with the valve outlet, closing the container and said sealing element is joined to an actuating rod which runs inside said inner cylindrical space of the valve body and is actuated in turn by a tappet, against the action of a spring. See column 4 lines 21-37.

With respect to claim 19, Ryan teaches an ink dispensing device, for the implementation of a process according to claim 1 and to be used in conjunction with a container having deformable walls and a container outlet, of the type of devices that comprise support means for the ink container, ink dispensing means and a tank wherein doses of ink are poured from the ink container, characterized in that it comprises container outlet opening means, and in that the ink dispensing means comprise means for exerting pressure against the deformable walls of the container, against said

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container outlet, so that the combined action of compression pushes the ink contained in the container, thanks to the possibility of deforming the deformable walls of the container, by the flattening thereof, against the opening, whereby doses of ink exit towards said tank. See column 3, lines 31-53 and Fig. 1.

With respect to claim 20 Ryan teaches that it comprises operating time control means for the pressure and flattening means on the container. See column 9 lines 41-47 and Fig. 17.

With respect to claim 22 Ryan teaches that said control means comprise height-measuring means, in the tank, of the fluid dispensed of the dose that exits the outlet. See column 3 lines 60-66 and column 9 lines 41-47.

With respect to claim 23 Ryan teaches that the opening means are arranged in lower position, and the pressure and flattening means are adapted for exerting pressure downwards against the deformable walls of the container. See column 3, lines 31-53 and Fig. 1.

With respect to claim 24 Ryan teaches that said pressure and flattening means comprise a plunger which acts on deforming the container against the opening. See column 3, lines 31-53 and Fig. 1.

With respect to claim 28 Ryan teaches that said pressure and flattening means comprise a plate, actuated by at least a cylinder, which exerts pressure simultaneously and perpendicularly against the deformable walls of the container and against a fixed, non-deformable wall of the dispensing system. See column 3, lines 31-53 and Fig. 1.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan in view of U.S. Patent No. 4796782 to Wales et al.

Ryan teaches all that is claimed as in the above rejection of claims 1-3, 5-7, 11-20, 22-24 and 28 except that said time control step and means comprises the measuring of the weight of the ink dose that exits the outlet.

Wales et al. teaches a method and apparatus for dispensing ink having a time control step and means which comprises the measuring of the weight of the ink dose that exits the outlet. See column 3 lines 3-42.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method and apparatus of Ryan to have the weight measuring step and means of Wales et al. in order to more accurately measure the amount of ink leaving the container.

6. Claims 8 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan in view of JP 6071860 to Takeuchi.

Ryan teaches all that is claimed as in the above rejection of claims 1-3, 5-7, 11-20, 22-24 and 28 except that the step of exerting pressure comprises exerting pressure

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by the action of at least two antagonistic cylinders which are displaced vertically and in parallel to one another downwards against the container walls.

Takeuchi teaches a method and apparatus for dispensing ink including a step of exerting pressure comprises exerting pressure by the action of at least two antagonistic cylinders which are displaced vertically and in parallel to one another downwards against the container walls. See Abstract and Figures.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method and apparatus of Ryan to have the pressure step including cylinders as taught by Takeuchi in order to more completely and evenly remove the ink from the container.

7. Claims 9-10 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan in view of DE 4026729 to Lindblom.

Ryan teaches all that is claimed as in the above rejection of claims 1-3, 5-7, 11-20, 22-24 and 28 except that the step of exerting pressure comprises exerting pressure using at least one cylinder which is simultaneously vertically displaced downwards against the deformable walls of the container and against a fixed, non-deformable wall of the dispensing system and comprises simultaneously exerting pressure against the deformable walls of the container and against a fixed, non-deformable wall of the dispensing system, using a handle of a connecting rod-handle mechanism actuated by a plunger.



Lindblom teaches a method and apparatus for dispensing ink including that the step of exerting pressure comprises exerting pressure using at least one cylinder which is simultaneously vertically displaced downwards against the deformable walls of the container and against a fixed, non-deformable wall of the dispensing system and comprises simultaneously exerting pressure against the deformable walls of the container and against a fixed, non-deformable wall of the dispensing system, using a handle of a connecting rod-handle mechanism actuated by a plunger. See Abstract and Figures.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the method and apparatus of Ryan to have the pressure step and apparatus as taught by Lindblom in order to more completely and evenly remove the ink from the container.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 2,143,885 to William, U.S. Patent No. 3,316,839 to Lake, U.S. Patent No. 3,561,360 to Branfield et al. and U.S. Patent No. 3,589,288 to Lake each teach an apparatus and method having apparent similarities to the claimed subject matter.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill E. Culler whose telephone number is (571) 272-2159. The examiner can normally be reached on M-F 10:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jec

*Jill E. Culler*  
Patent Examiner